

APPENDIX A:
SUPPLEMENTARY FIGURES AND GRAPHS

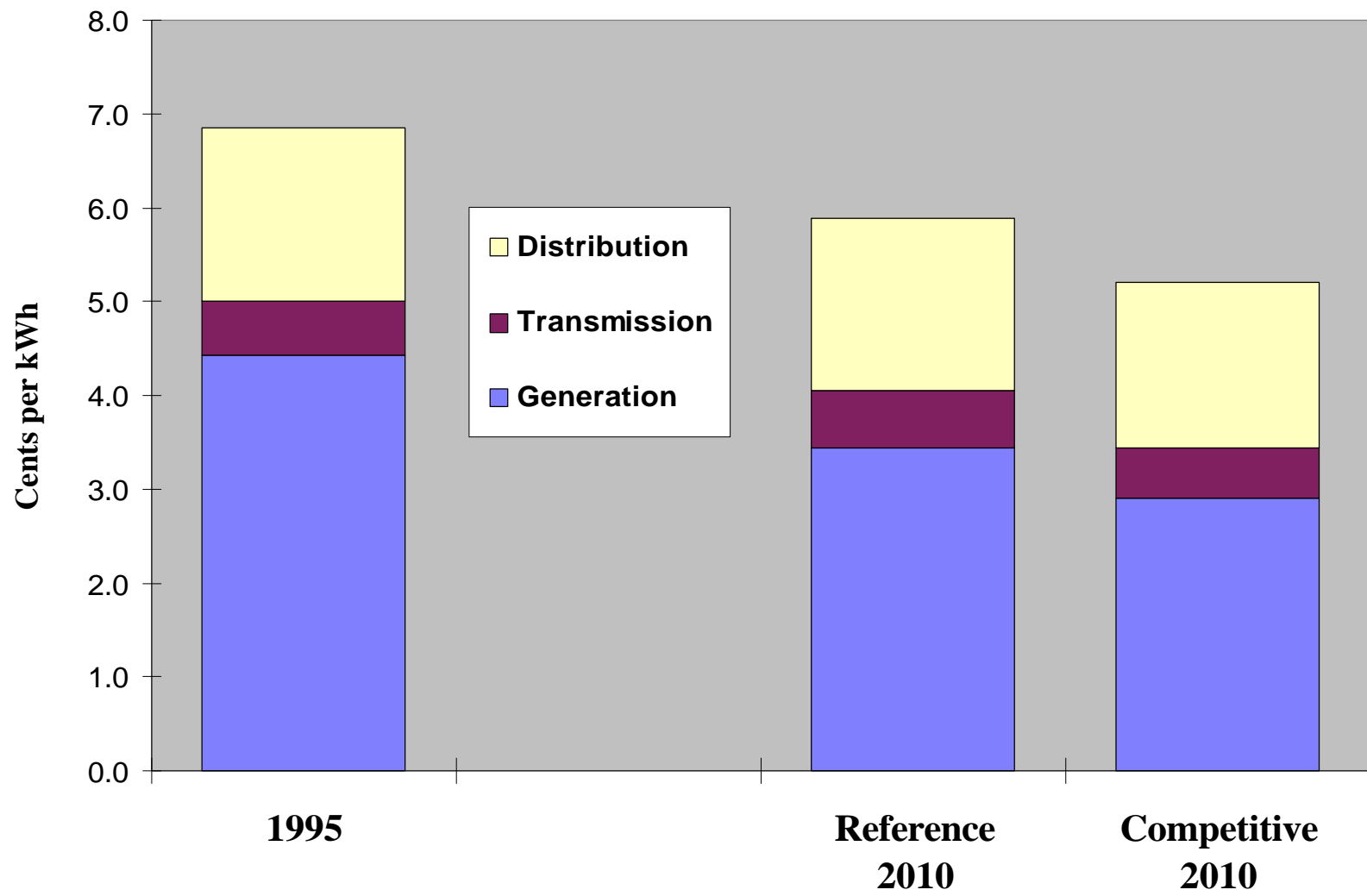
OUTLINE OF APPENDIX

- Key Components of the Comprehensive Electricity Competition Act
- Reference and Competitive Case Assumptions
- Analytic Results
 - Prices
 - Stranded Assets
 - Emissions
 - Trade
 - Generation
 - Consumption

Key Components of the Administration's Plan

- Flexible Mandate for Retail Competition by 2003
- Consumer Information Provisions
- Enhanced Reliability Through Requirements for Industry-Wide Reliability Standards Monitored by FERC
- Supports Recovery of Prudently Incurred Legitimate and Verifiable Stranded Costs
- Renewable Portfolio Standard
- Public Benefit Fund
- Revise Federal Electricity Law
 - Repeal PUHCA
 - Repeal PURPA
 - Update the Federal Power Act

COST OF SERVICE AND COMPETITIVE ELECTRICITY PRICES (1995 cents/kWh)



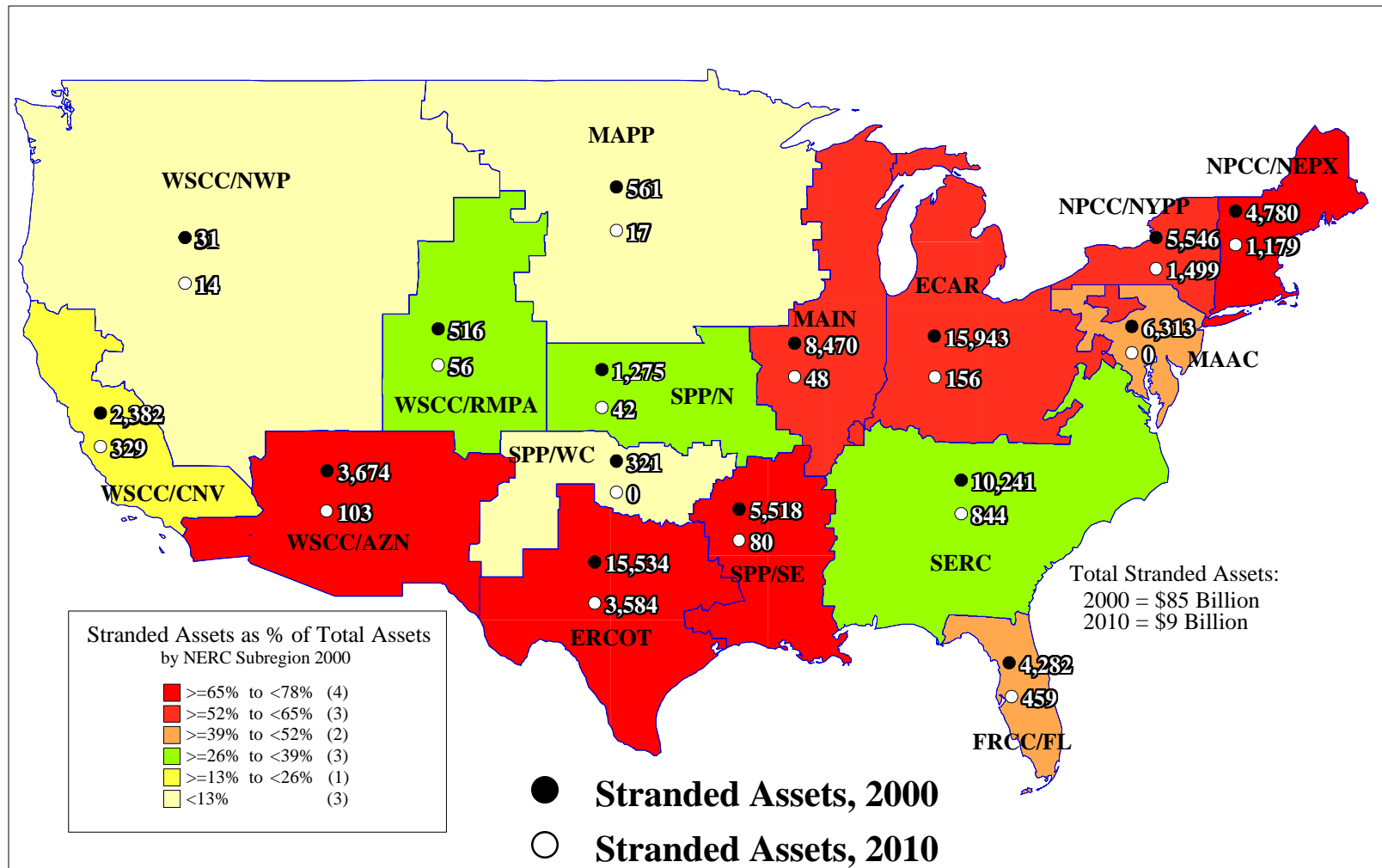
CATEGORIES OF STRANDED COSTS

- Existing and Productive Generating Assets
- Regulatory Assets/Deferred Costs
- Contracts and Other Transition Costs
 - Fuel Contracts
 - QF Contracts
 - Purchased Power/Power Sale Contracts
(Cooperatives, Municipals, and IOUs)
- Plant Decommissioning (particularly nuclear)

STRATEGY FOR ESTIMATING STRANDED EXISTING AND PRODUCTIVE GENERATING ASSETS

- Compute Annual Competitive Surplus By Generating Asset
 - Compute Competitive Projected Annual Revenues (Prices * Quantities Sold)
 - Compute “Going Forward” Costs
 - Compute Present Value of the Competitive Surplus (Revenues - Cost)
- Compute Present Value of Regulated Allowed Return of and on Capital by Generating Assets.
 - This is equal to the net book value of the plant
- Stranded Assets are the Difference Between Present Values of Competitive Surplus and Regulated Allowed Return
 - Sum asset level results for the business unit and assign to two groups (positive and negative)

STRANDED PRODUCTIVE GENERATING ASSETS BY NERC SUBREGION 2000 AND 2010 (Millions \$)



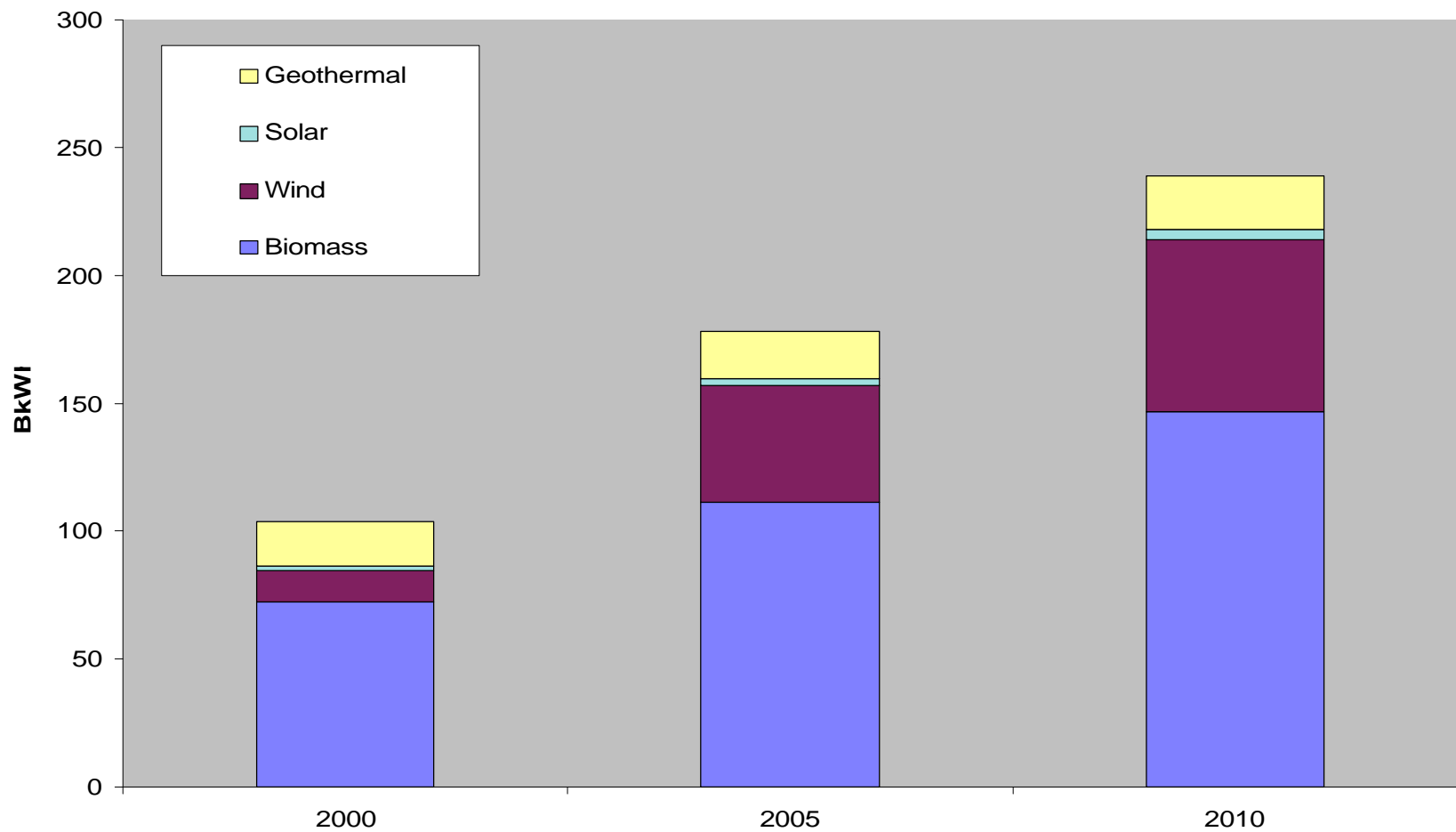
STRANDED ASSET SUMMARY

- A switch to Marginal Cost Pricing in 2000 could result in Stranded Productive Generating Assets of \$85 billion in that year. Assuming that Cost of Service Ratemaking works perfectly, a delay in the advent of competition reduces the amount of stranded assets.
- Regulatory Assets and Existing Contracts (e.g. Fuel, QFs, Purchased Power) are potential sources of additional costs that could be stranded under some scenarios.
- Future Plant Decommissioning Costs (mostly nuclear) are an issue with or without Retail Competition and are included in both Reference and Competitive Scenarios.

Renewable Portfolio Standard (RPS)

- The RPS directly increases renewable capacity and generation.
 - although not uniformly distributed across regions, renewables are added in all regions of the country.
 - wind and biomass account for most additions.
- With the RPS, gas generation is lower and therefore gas consumption and prices are also lower.
- The presence of renewables decreases the short-run marginal cost of generation by shifting the dispatch curve.
- In aggregate, the price decrease partially offsets the premium consumers must pay to support the additional renewables.

Renewable Portfolio Standard and Green Power -- Generation by Fuel (BkWh)

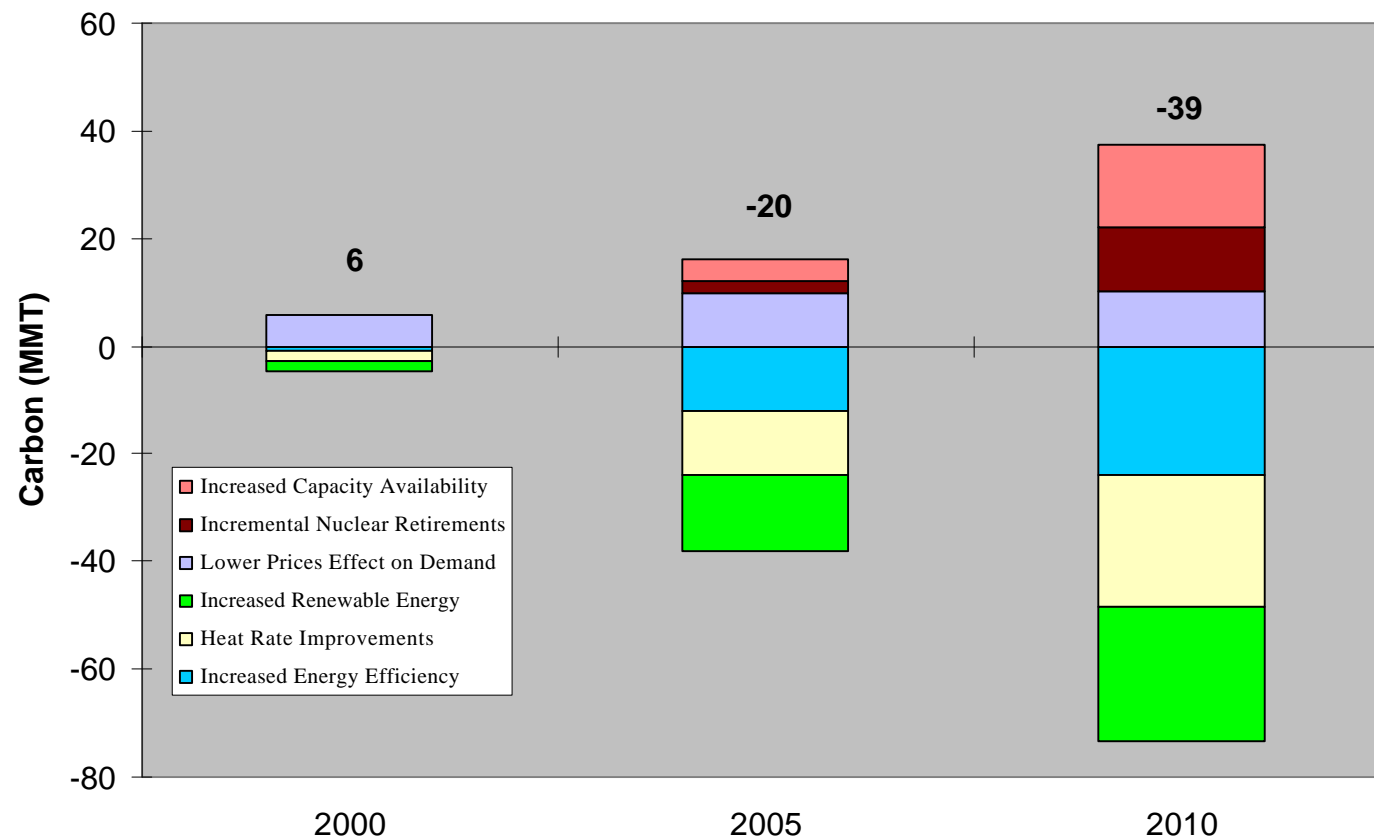


EMISSIONS IMPLICATIONS

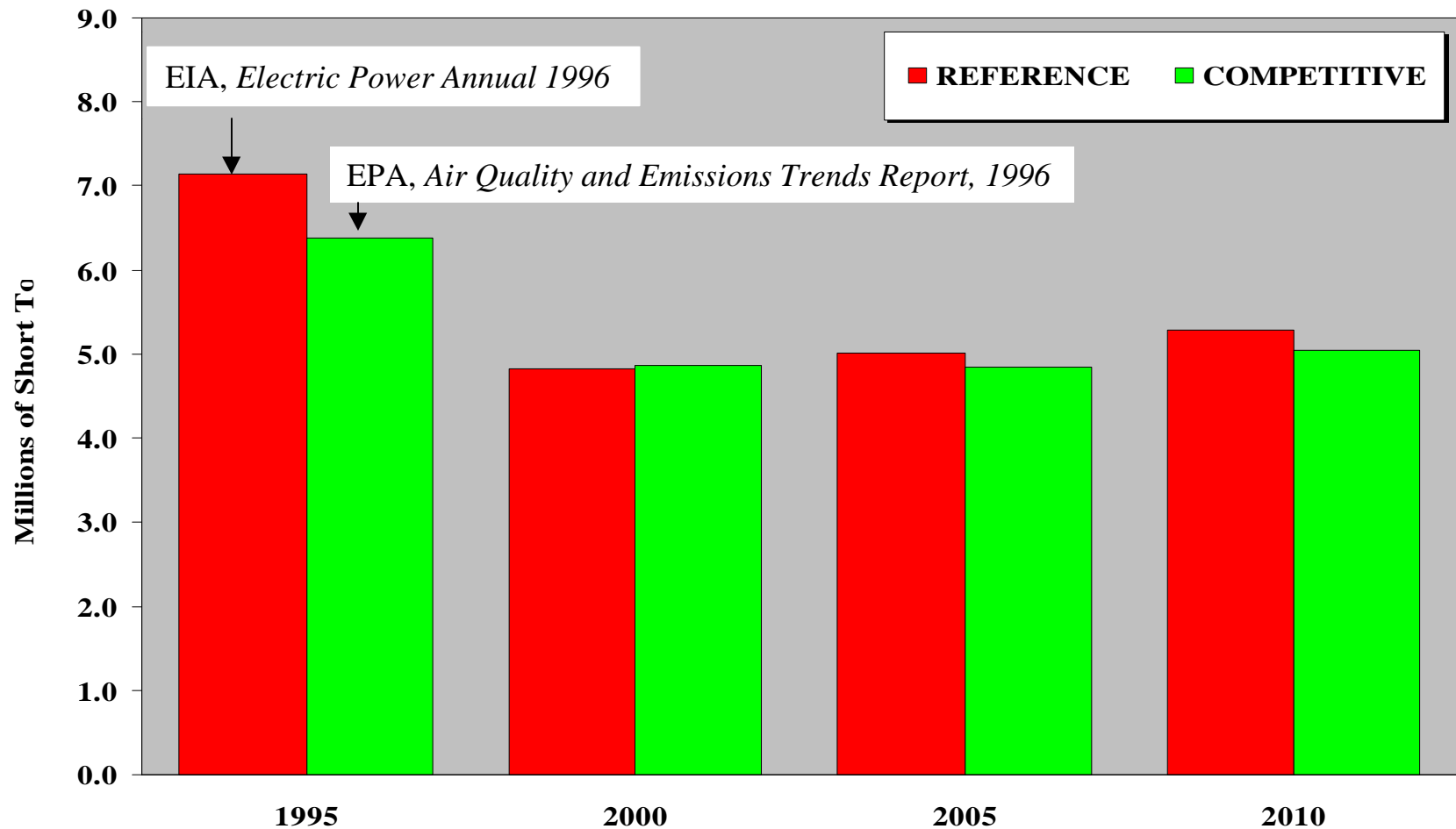
Some restructuring forces work to increase emissions (+), while others work to reduce them (-):

- Demand response to price reductions (+)
- Increased incentive for heat rate improvement (-)
- Reduction of fossil energy consumption in end-use sectors(-)
- Product differentiation, including efficiency services marketing (-) and green power (-)
- Load shifting (mostly +, but some -)
- Cost of capital (mostly -, but some +)
- Dispatch changes (initially +)
- Stranded cost recovery (-)
- Renewable portfolio standards (-) or added support for energy efficiency programs (-)

Elements Contributing to Carbon Savings (MMTCE)

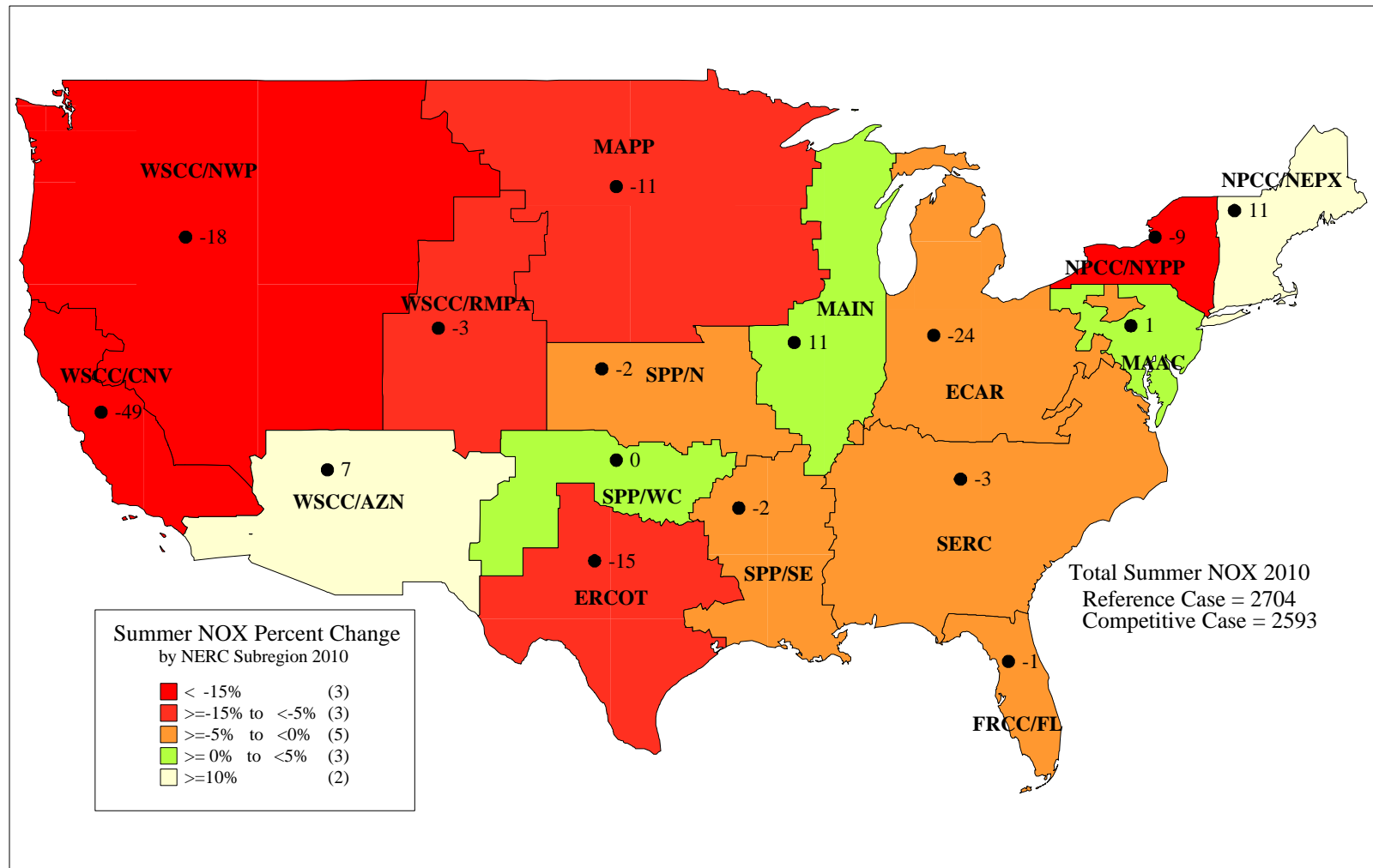


ANNUAL NO_x EMISSIONS

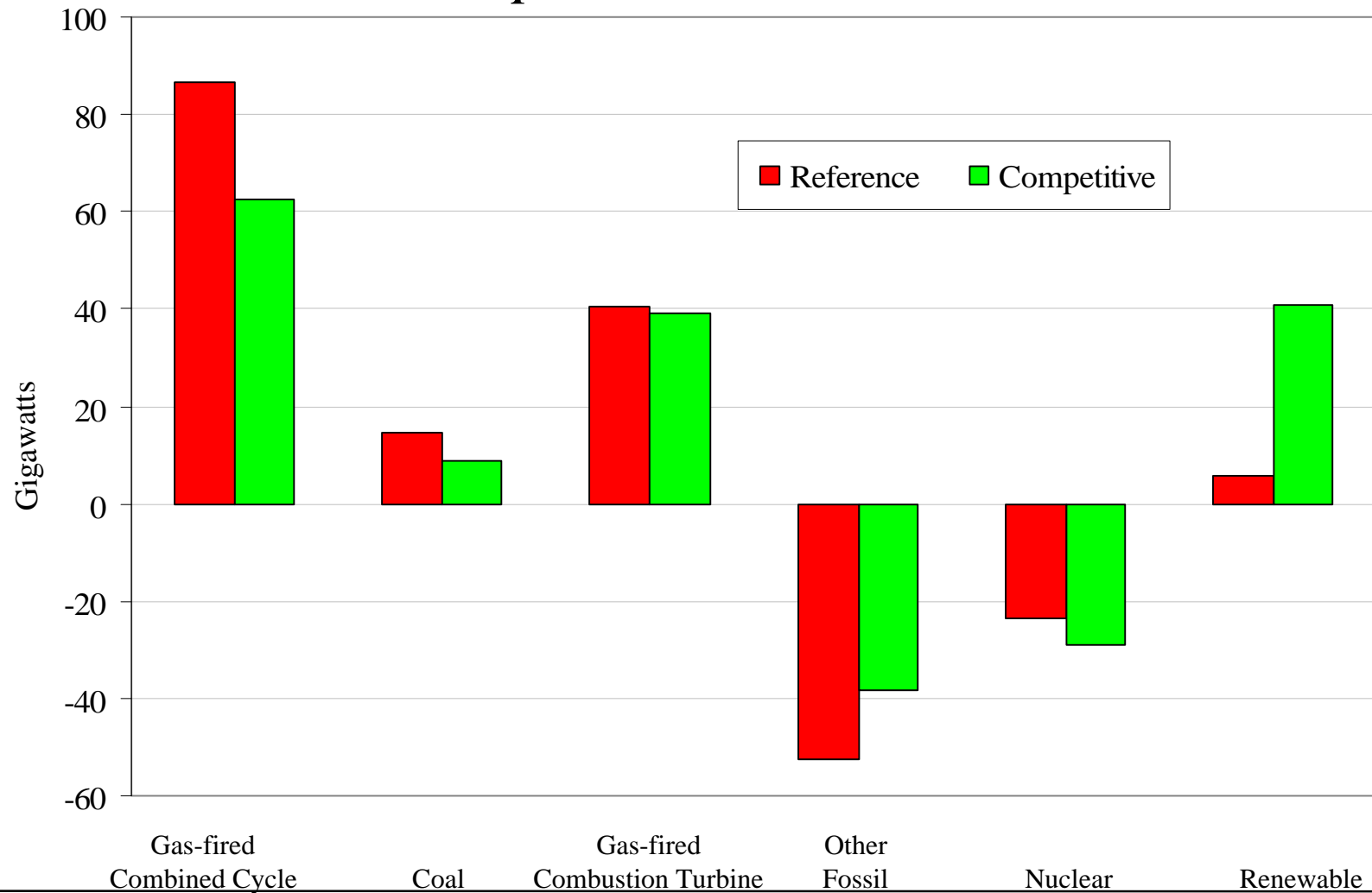


Note: Phase 2 NO_x standards, but no new actions to address ozone non-attainment under existing or clarified authority, are modeled. EPA's proposed NO_x SIP Call could result in further significant reductions in projected emissions.

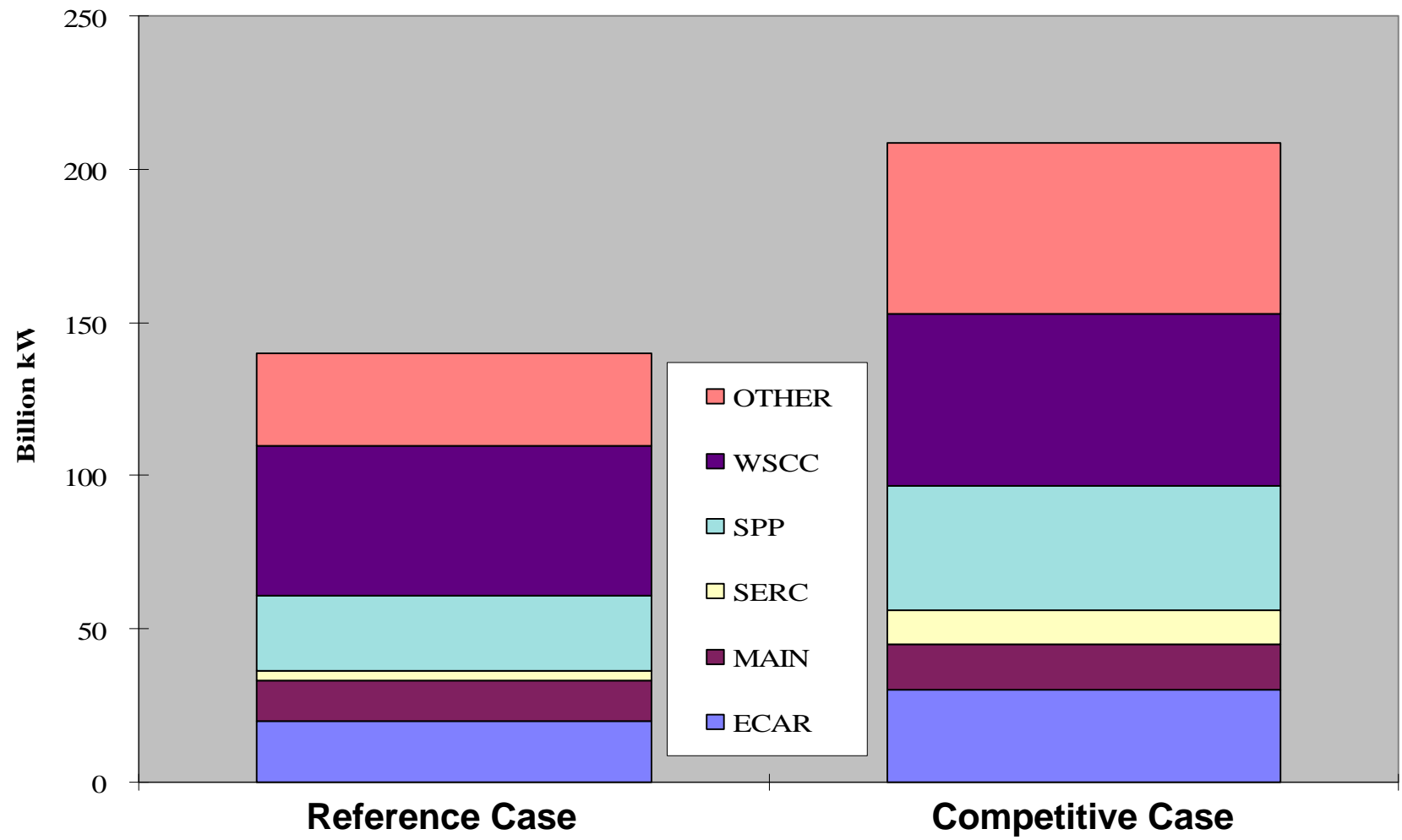
Summer NO_x Differences - Competitive Case minus Reference Case (2010)



Cumulative Change in Capacity for Reference and Competitive Cases, 2010

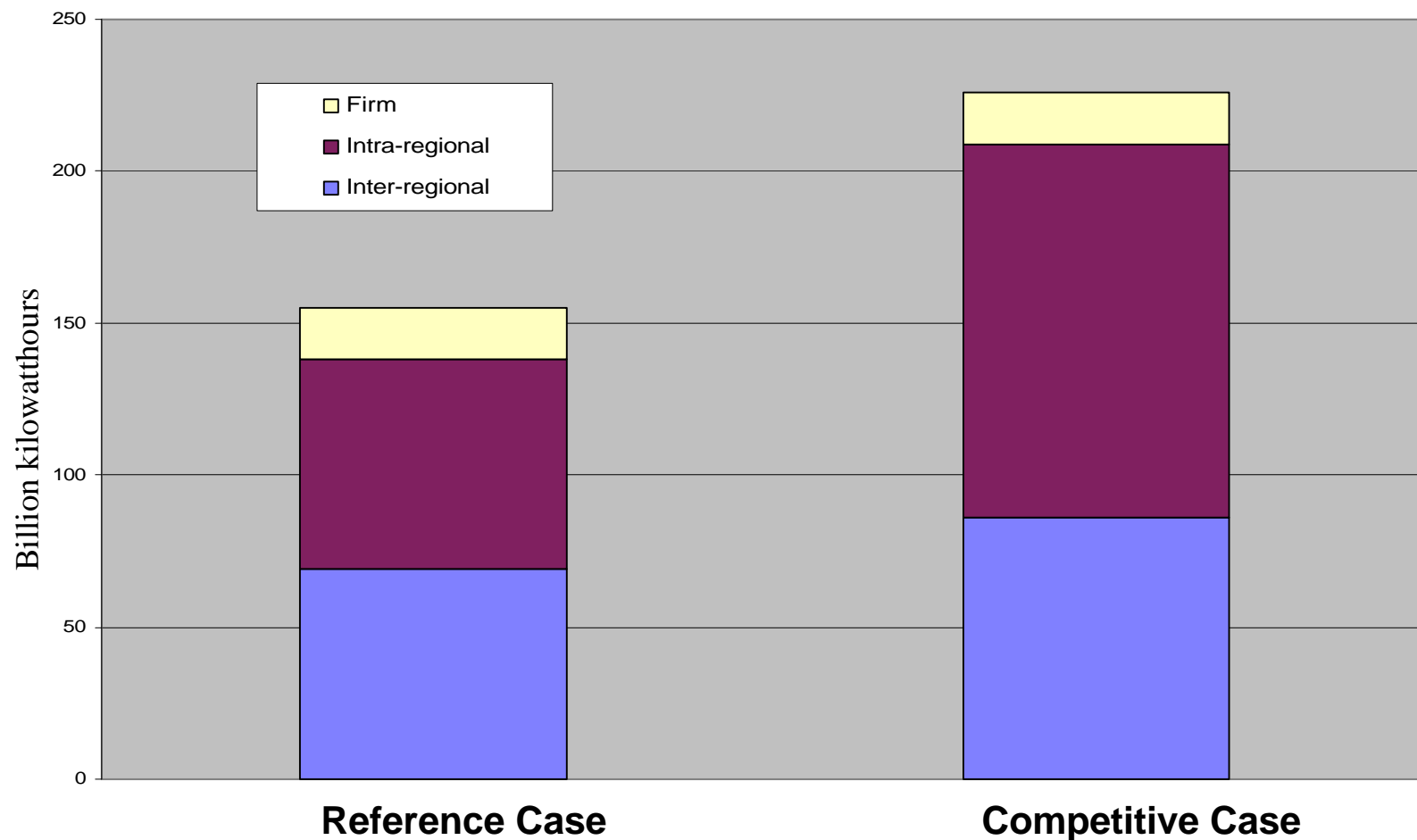


ELECTRICITY TRADE (YEAR=2010) ***BY NERC EXPORT REGION***

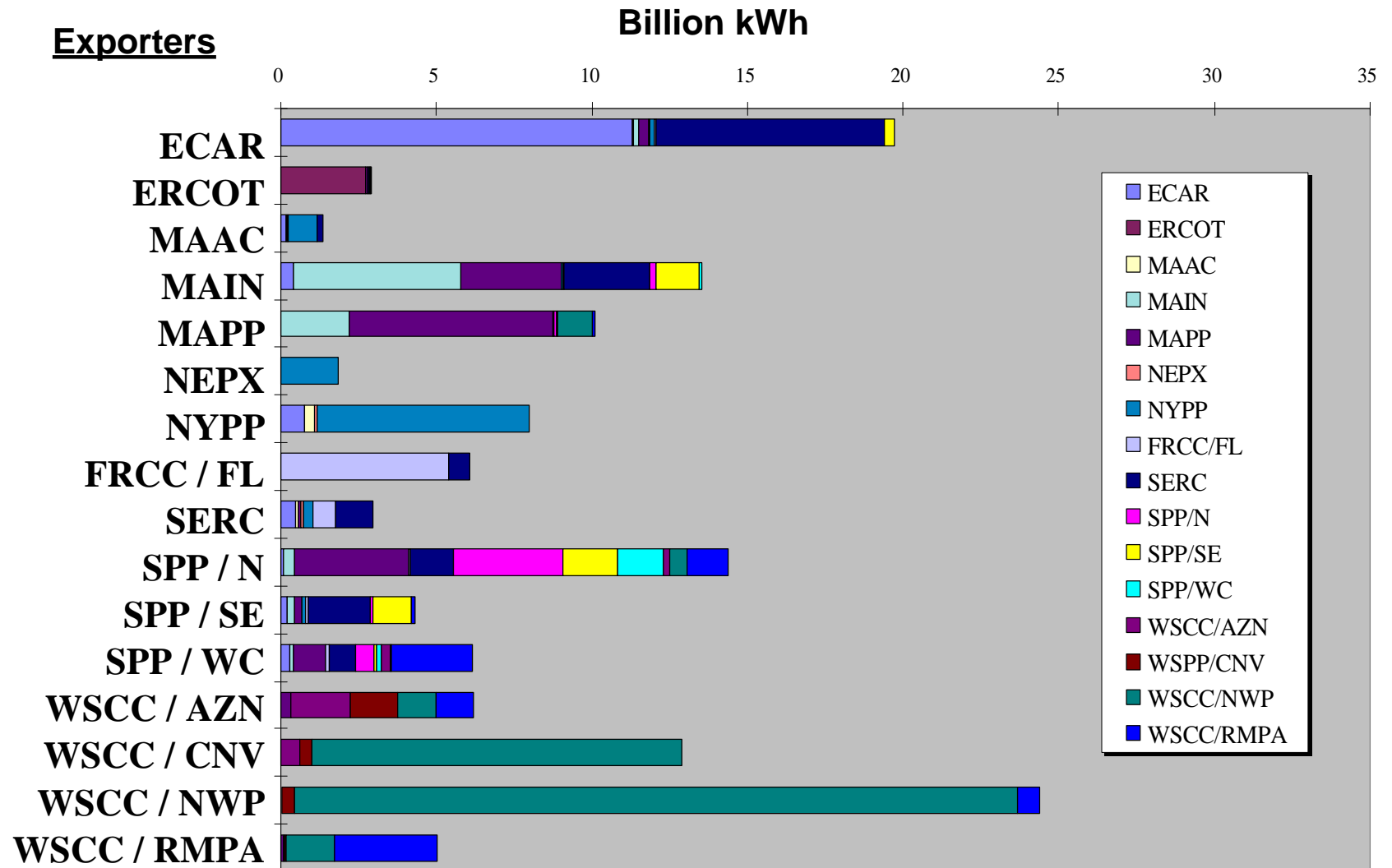


ELECTRICITY TRADE (YEAR=2010)

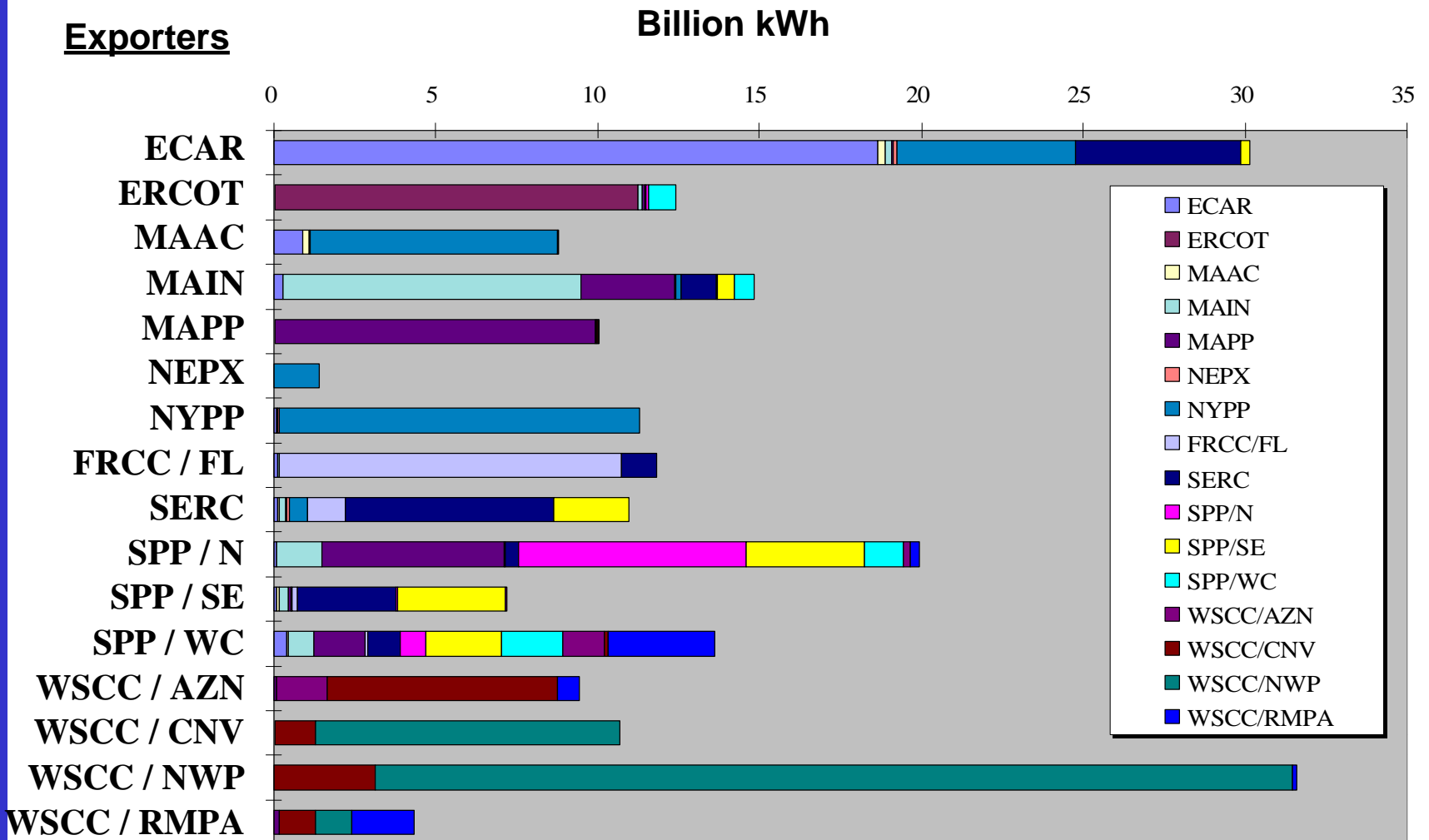
INTER V. INTRAREGIONAL SALES



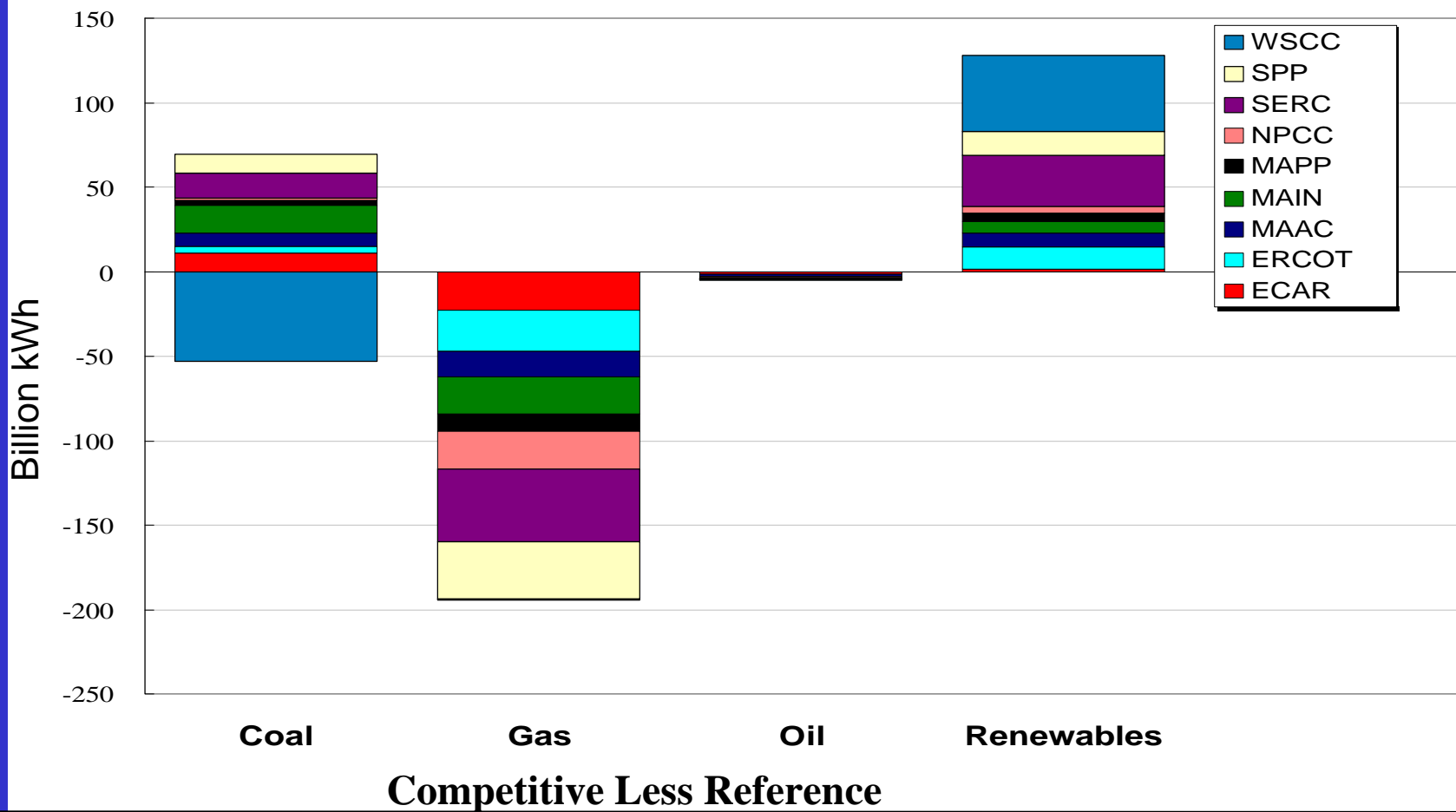
TRADING PARTNERS: Reference Case



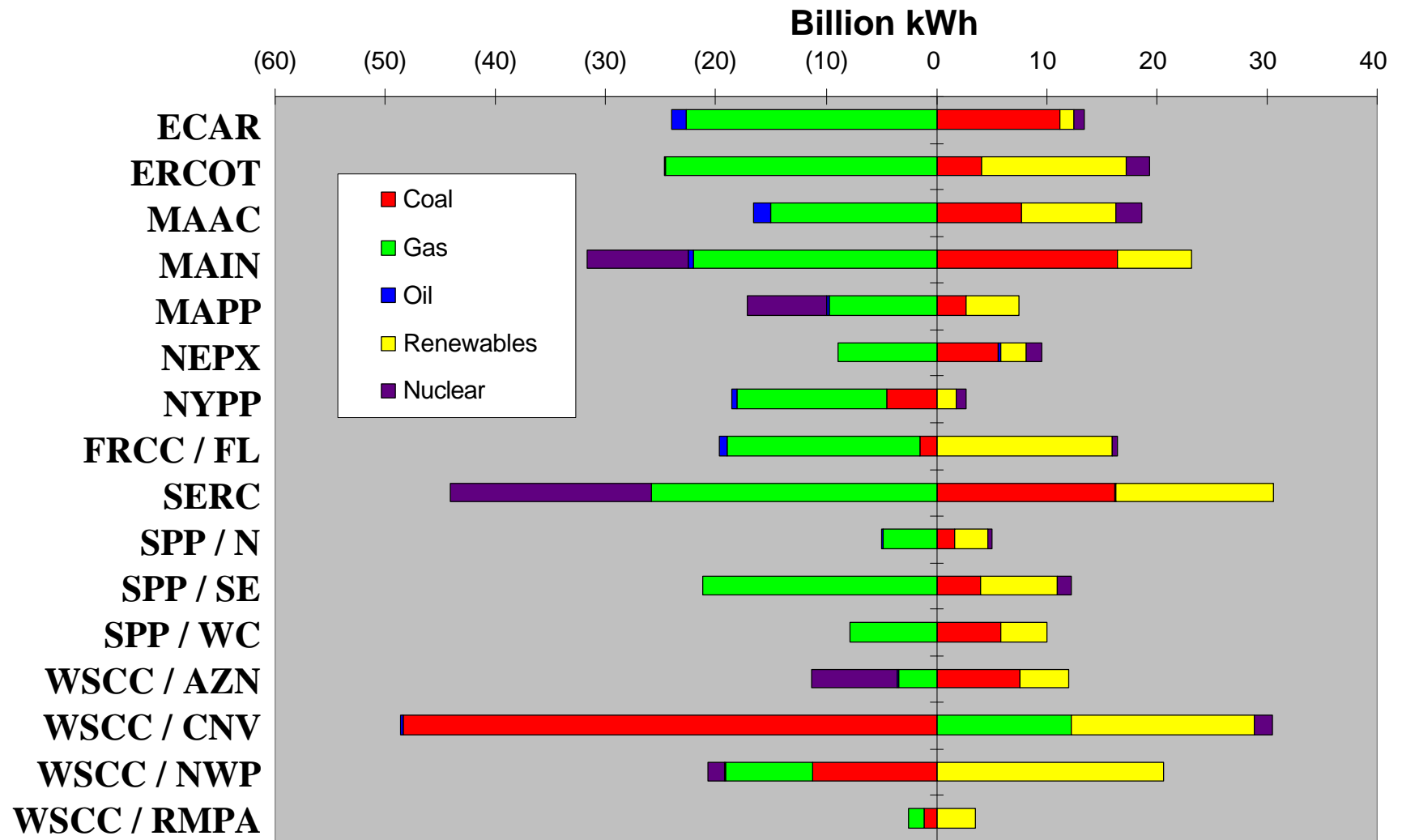
TRADING PARTNERS: Competitive Case



CHANGES IN GENERATION MIX ACROSS SCENARIOS (YEAR=2010)



CHANGES IN TOTAL GENERATION: COMPETITIVE VS. REFERENCE CASE (YEAR=2010)



Changes in Regional Demand by Sector: Competitive Case Less Reference Case, 2010

